

Abstract of the Disclosure

This invention provides a paint film forming method comprising applying color base paint onto rigid resin parts and then clear paint and curing the two paint films, which is characterized by using, as said clear paint, a clear paint comprising 60-90% by weight of a hydroxyl-containing acrylic resin (A) and 10-40% by weight of a curing agent (B), based on the combined solid content of the acrylic resin (A) and the curing agent (B),

said acrylic resin (A) having a hydroxyl value of 80-160 mgKOH/g and being prepared by radical copolymerizing (a) 8-30% by weight of a primary hydroxyl-containing monomer selected from 4-hydroxybutyl (meth)acrylate monomers and ϵ -caprolactone-modified vinyl monomers obtained by ring-opening polymerization of ϵ -caprolactone with hydroxyalkyl (meth)acrylate; (b) 10-40% by weight of secondary hydroxyl-containing monomer; and (c) 30-82% by weight of still other polymerizable unsaturated monomer.

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This invention provides a paint film forming method comprising applying color base paint onto rigid resin parts and then applying clear paint and curing the two paint films. The clear paint comprises 60-90% by weight of a hydroxyl-containing acrylic resin (A) and 10-40% by weight of a curing agent (B), based on the combined solid content of the acrylic resin (A) and the curing agent (B). The acrylic resin (A) has a hydroxyl value of 80-160 mgKOH/g and is prepared by radical-copolymerizing (a) 8-30% by weight of a primary hydroxyl-containing monomer selected from 4-hydroxybutyl (meth)acrylate monomers and ϵ -caprolactone-modified vinyl monomers obtained by ring-opening polymerization of ϵ -caprolactone with hydroxyalkyl (meth)acrylate; (b) 10-40% by weight of secondary hydroxyl-containing monomer; and (c) 30-82% by weight of still other polymerizable unsaturated monomer.